## SUBSCRIPTION EXPIRES

THIS MONTH WE SALUTE .

### www

(SEE PAGES 8 & 9)



C I Farlow

MADDE

70707

# FLORIDA SKIP

Vol. 11 No. 10

The All-Florida Radio Amateur's Publication

**MARCH 1968** 

Price 20c

OUTGOING NOFARS PRESIDENT Ron Locke W4YPX (left) latches onto Florida Skip Field Day trophy while club FD Chairman Jesse Morris W4MVB, attaches 1967 winner's nameplate. The club station, W4IZ, has won the award twice in succession. One more time and they keep it. (photo by WA4DWR)



BELIEVE IT OR NOT but John WA4QLZ (left) and Glenn WA4LHK won the South Fla. (Miami) FM Association hidden transmitter hunt with this quarter wave vertical connected to a garbage can lid.

(photo via WB4FII)

## Fla. Skip Hosts 4th Annual QSO Party

FLORIDA SKIP, the all Florida Amateur Radio publication, is happy to announce the FOURTH annual FLORIDA QSO PARTY to be held March 30 and 31st, 1968. All amateurs are invited to participate. Florida amateurs are urged to work as many out-of-state stations as possible, as well as those within the state. This year provisions have been made for multi-operator Florida stations. It is hoped that many clubs and rare county expeditions will participate in this category.

CONTEST PERIODS: 1500-2000, 0000-0500, 1400-2400 all

times GMT

NO POWER RESTRICTIONS OR TIME LIMIT.

SUGGESTED FREQUENCIES: CW 1815, 3530, 7030, 14,030, 21,030, 28,030 kHz. PHONE 3930, 7230, 14,230, 21,330, 28,820 hKz.

SCORING: Florida stations, i point per QSO X number of states, Canadian provinces and countries.

Other stations in Florida may be worked only for contact points and to work for your W.A.F.C. (Worked All Florida Counties) award, but no other multiplier except as a state. Out-of-state stations: One point per QSO X number of Florida counties as follows: First 15, 100 points. Second 15 counties, 200 points. Third 15, 500 points. All 67 counties 1500 points. Phone and CW contests separate scoring. Stations may be contacted on each band (i.e. 1815, 3530, etc.) for points.

AWARDS: Certificates will be awarded to the highest scoring station in each state, Canadian province and foreign country (with 5 or more contacts). Certificates will be awarded to the highest scoring single operator and to the highest scoring multi-operator stations (with 50 or more contacts) in each

(Continued on Page 16)

## South Fla. FM Association

By Kitty Holdahl WB4FII

On January 21, 1968, we had a hidden transmitter hunt on 146.940 mc. Bun, K4EBG, was the hidden transmitter. We had 12 mobiles and about 25 people at the hunt.

Bun did a wonderful job of hiding and afterwards he cooked a delicious spaghetti dinner. If he ever invites you to dinner make sure and go, he is a great cook.

John, WA4QLZ came in first with a quarter wave vertical connected to a garbage can lid. WA4LHK, Glenn and K4YSN, Tandy acted as his co-pilots.

Most of us had a couple of copilots, mine were two of the nicest XYL's you will ever meet—W4TQH's XYL Phyllis and WB-4DZH's XYL Anita. Don't ask me how long it took us to find the transmitter, being XYL's we were entitled to some extra time. CUL

#### FLORIDA SKIP, INC.

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PERMISSION: Anything in Florida Skip may be reprinted in any other amateur radio publication in the world with a Credit Line please.

Dear Mabel XYL Award, c/o Skip, Box 501, Miami Springs, Fla.

#### FLORIDA SKIP CORRESPONDENTS

IT'S A FACT. Geo. Hunt, W4NUT 1218 S.W. 21st Ct., Ft. Lauderdale.

"Special OT reporter, Lee R. Scaggliozzi, W4VLN, 12261/2-15th St. N., St. Petersburg, Fla. 33705."

HINTS & KINKS, R. V. Frederick K4UGC, 460 N. W. 108th Terrace, Miami 33150.

ONYX, MABEL, THE OLD TIMER c/o Florida Skip, P. O. Box 501, Miami Springs 33166.

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Amateur TV. Robert Montgomery K4VFV, 903 Ferndell Rd., Orlando, Fla. 32808

ARMY MARS, Joseph C. Patterson, AD4TZI, Ft. Pierce, Florida

AF MARS, Alan Strauss, WA4JTK, Carol City, Fla.

NAVY MARS, Jim Wilson W4GDK, 1204 Avacado Isle, Ft. Lauderdale, Fla.

VHF SSB'ers R.D. Ralston, K4LFF 7195 59th St., Pinellas Park, Fla.

2/FLORIDA SKIP March 1968

NETS FSBA, K4SRI, Holly Hill FMTN, W4AKB, Miami FLAMINGO, W4EDP, Miami QFN, WA4OHO, St. Pete TPTN, W4SMK, Ft. Myers FATT, W4ZAG, Tampa

CLUBS Broward ARC, W4GDK, Ft. Lauderdale NFARS, K4DSN, Jacksonville Ft. Myers ARC, W4SMK, Ft. My-Gainesville ARS, K4RDP, Gainesville Orlando ARC, W4BKC, Orlando HARS W4NQX Tampa TARC, W44HDK, Tampa VERO BEACH ARC, WB4COM, Vero Beach. Platinum Coast ARS, WN4FVA Melbourne GULFSTREAM SOCIETY of A.R. OPS WB4AID, Lake Worth. West Palm Beach ARC, John Ben-jamin, West Palm Beach Sun Coast VHF, WA4EDL, St. Pete DADE ARC - W4EDP, Miami Suncoast Roving and Floridora, W4BAV, Sarasota Indian River ARC, WAAKJV.

#### **EX-CALLS**

Rockledge

Here are some more Ex-Calls. Have you sent in yours yet? You'd be surprised how many old friends have been reunited through this column. Skip Box 501, M. Spgs., Fla. 33166. W4HN ex 8CKF 8 BGP 4DD

W8CFT W9ZAB W4GKC

W4FWI ex 3ABKX 8AMJ BX of 8XE W3BAI W3ZAU

W4AAT ex HH2CP W9MMO KP4LV KV4AB

W4KB ex 5NM NU5MN W5-

K4DN ex NU5LINU5AYE NU5CI W5IGR W4RUU

K4MJJ ex 2AMA W2BJO W2EMV

### Guest Editorial

(Editors Note: This month our guest Editoral comes from the Penn Wireless Association, Inc, K3HNP Editor)

> INCENTIVES — By FRED MOORE, W3WZU

Incentive licensing is now a reality. It's a step in the right

direction -- but, by far, not nearly enough.

Many hams will ignore it and be content with their General tickets. Others will run downtown and buy a Q & A book or license Manual and after a few memorizing sessions manage to get an "Advanced" or "Extra". Let's not forget that the true intended purpose of Amateur Radio must be served if we are to justify our existance to the F.C.C. and the I.T.U. and

keep our frequencies.

Otherwise we may wake up some morning and find ourselves tuning up five watt rigs on 27 MHz or worse yet 0 MHz, having lost many or all of our bands to commercial services. A ham ticket used to mean that its holder had a reasonable degree of technical proficiency. Today the appliance operator reigns supreme. Ten percent down; plug it in the wall and start talking. Impress a lot of people too as he twirls the knobs on hiscomplex-looking electronic toy. Idle chatter, certificates of false achievement, contests, cozy club meetings and round tables, won't justify our existance to the powers that be. Laser development, moonbounce, and satellite communications, troposcatter, radio astronomy; phase-lock techniques functional uses for A.T.V. are just a few challenges waiting for us. For the less technically oriented, development of skills in foreign languages would go a long way toward promoting international good will as we do our DX'ing. For others, traffic handling; phone patches for far-off servicemen and their families serve a great need that nobody can deny. For others, still: public relations activities to keep the public aware that we are ready, willing and able to provide service in emergencies and otherwise would fill a crying need.

Let's contribute something to the state of the radio art. Let's talk to a man and try to understand him in his own

language.

Let's handle a phone patch for some poor boob stuck in Antarctica.

Let's set ourselves up as examples of what the true amateur radio operator is all about.

Let's give of ourselves and we will benefit in ways most of us haven't dreamed of.

---W3WZII



## **Letters To Editor**

Dear Andy.

Happy to renew my subscription to the Skip . . . it's a fine AR paper. Like to stay in touch with the happenings in the grand ole state of Florida...cause hope to call it "home" some day!

Some day I'll drop you a photo and might even take you up on a free Hambar, HI ... but my two pet peeves, I'll be happy to pass on to you right now. Having worked AR fm DX areas for 99% of the time I have been licensed since 1954...my biggest peeve is is against the US amateurs - the majority whom refuse to conform to the standard writing of the date, as practiced by the majority of the world. as day/month/year! If one writes "1 Feb 68", it is easily understood, or even if one writes it as "1-11-68". Even the USA method of saying Feb. 1, 1968 would be OK if all followed that simple procedure, but they don't. Some insist on resorting to numerals also, so they come up with II-I-68, or

21-1-68 which may mean February 1, 1968 to an American, but means the 2nd of January to other amateurs throughout the world! I consider this even worse than non-usuage of GMT time, my second pet peeve, cause if you at least know the correct date of the QSO, after a hunt you might locate the QSO in the log ... regardless of the time used. But it's not so easy when you don't even know the correct month of the QSO!

That's all for now, Andy. Keep up the good work.

Vy 73, GH es Auf Wiedersehen, de Al K1QHP/DL4EO Kassel, Germany

Editor SKIP:

Very nice of you to remind me of the status of my subscription. After only

(Continued on Page 13)



The new model 500C is the latest evolutionary development of a basic and well proven design philosophy. From the very beginning, with the introduction in 1961 of the first single band SSB Transceiver, Swan has followed a steady course of improvement by evolution. You might think that we would finally reach the point of leaving well enough alone, but with some 18 licensed hams in the engineering, sales and production departments of our organization, it just isn't possible. Thus, the new model 500C, with greater power and additional features for even

more operator enjoyment.

RCA recently introduced a new heavy duty "blast rated" tetrode, the 6LQ6. With a pair of these rugged tubes the final amplifier operates with increased efficiency and power output on all bands. PEP input rating of the 500C is conservatively 520 Watts. Actually, an average pair of 6LQ6's reach a peak input of over 570 Watts before flatoning!

Further refinement of the famous Swan VFO results in even greater mechanical and thermal stability and more precise dial calibration. Custom made planetary drives, machined to extremely close tolerance, provide velvet smooth

For the CW operator the 500C includes a built-in sidetone monitor. Also, by installing the Swan Vox Accessory (model VX-2) you will have break-in CW operation. Thus, the model VX-2 now fulfills a dual function, both automatic voice control and break-in CW keying. Grid block keying of a pure CW carrier is employed with off set transmit frequency. mit frequency.

The 500C embodies the Swan's well known dedication to craftsmanship, performance and reliability, with a service policy second to none. When you visit your Swan dealer and look over the 500C, we are sure that you will be glad we couldn't 'let well enough alone."

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## SCM's CORNER

By JESSE H. MORRIS W4MVB

This month I have a few announcements to make. First of all effective February 15, 1968, Bill Blasingame, WA4NEV, will become assistant SCM for Eastern Florida. This move is brought about by the fact that I will be out of the state for two or three months beginning at that time. In addition to that Bill should be able to assist me when I return in order that I may be a little more efficient in the correspondence department than I was the past year. All radio traffic reports should be sent to Bill until further out to be a little different than notice. Mail reports and other correspondence may be sent to my post office box in Jacksonville Beach as usual. Bill will forward any correspondence to me until I return. I will be in Norfolk, Va. and I will be operating mobile on all bands so I hope to keep up with things in Florida and be able to participate in some of the nets.

The second change I would like to announce is in the PAM department. After many years of faithful service W4TUB has resigned. Fred's efforts in the past are appreciated and he will be missed. It has been decided not to fill the 75 meter PAM position as such but to move W40GX into that position with W4SDR remaining as PAM for forty meters. So until further

notice we will have just three PAMs for Eastern Florida. In addition to the two mentioned avove WA4BMC remains asVHF

All other appointments remain the same and that includes the SEC W4IYT and his assistand SEC W4FP. Andy and Tom have agreed to remain on as they are presently doing for a while longer.

I have completed one year as your SCM. I am not particularly pleased with myself for the first year. My work load turned I expected due to a change in jobs. I have not been prompt in correspondence. I hope with the help of Bill we can improve this situation in the current year. I thank all those who have helped and been patient. Bill's primary responsibility when I return will be traffic. He will be in charge of promoting more traffic reporting. Many thanks to all those who regularly reported last clined to stick around for another year to see how it all comes out. 73 and good luck. DE W4MVB

> SUPPORT FLORIDA SKIP ADVERTISERS

### Whisperings From An Assistant SEC

Tom Chisholm W4FP/A4FP

The twenty second ARRL Simlated Emergency Test is now istory and there only remains he reports from each partici-Lating EC of their activities and total points to be sent to W4IYT and the communications dept. ARRL. in the case of East Florida, and to W4IKB West Florida and ARRL.

A good size bundle of SET messages were expected at especially with 1196 ARPSC members registered in E. Fla. The total to W4FP was 186 and 21 to W4IYT, this of course included the West Fla traffic. As this would indicate about 17% participation which is quite low. At this writing it is not possible to know the individual participation and scores of each EC and his county. It is suggested that all EC's mail in their activity report on the SET to W4IYT and ARRL for East Fla. and W4IKB and ARRL for West Fla.

The low participation in the

## - Silent Keys -

This month we are very sorry year and we hope you are in- to report the passing of the following Florida amateurs:

Jose Ortaliz, K4MXH, Tampa, Florida.

Edward Hoge, W4DVK, Ft. Lauderdale, Florida.

Herbert La Morder, W4HDC, Oldsmar, Florida.

A. Evan Feightner, K4HH, Naples, Florida.

SET can be attributed to many reasons. Some amateurs may not wish to participate in any ARRL affairs. Others may have felt that the BEBA operation was enough for one year. Of course there is always the problem of getting the news of the SET to ARPSC members, and this is cared for by the EC and his assistants.

Other means of getting the SET news to all amateurs is via the traffic nets, the fraternal and benevelent nets, phone patch and rag chew nets and of course the MARS nets where some amateurs are interested in amateur and ARRL activity, although it appears that on some MATS nets ARRL info is not permitted, MATS info is sparingly sprinkled from time to time on some ARPSC nets. Then there is QST and FLORIDA SKIP and the newspapers, that is, some of them, where the news might be found relating to the SET. Most of the rewriting is good but some you will have to scrutinize very carefully, look for the word "HAM", that will be the first clue and perhaps the only one.

All nets particularly the FAST net who kept the 3940 slot hot both days of the SET are to be sincerely thanked for their invaluable service. East Florida was third in the nation in the 1967 SET with a total of 2040 points from 13 counties. CUL on "LO" net 3950, 8:00 p.m. every Thursday.

CUL W4FP

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#### SATURDAY, APRIL 27 - 0730 (Registration Opens)

5,000 Sq. Ft. Ground Floor Swap Shop, Electronic Shows, Races & AREC Meetings, NET Meetings, Prize Drawings, Floridora Birthday Party, Transmitter Hunt on 145.2 mc, S.S.B.A. Meeting, Q.C.W.A. Meeting.

Special Award to be Presented to GUS BROWNING by John Attaway, K4IIF at Banquet

#### SUNDAY, APRIL 28 -

Knights of Kilocycle Breakfast, Forums, Electronic Show, Prize Drawings, MARS (Army, Air Force & Navy), Races & AREC Meetings, Floridora Annual Business Meeting.

## MAIN PRIZE

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## **CLUB NEWS**

#### **GULFSTREAM SOCIETY**

by Al Suhr, WB4AID

As we all know, there are some of those jobs in committee work which really attract certain members. Our Gulfstream Society of Amateur Radio Operators is no different. For instance, take the recently appointed nominating committee, one of its mem-bers was nominated from the floor for the office of Historian -- and got elected. That turned out to be really funny because Mel Wrobbel, K4EBZ, had planned it otherwise, but the boys were on to him and gave him a job in-

The election was held at the regular meeting of February 2nd in the Lake Worth HDQTRS with the following results: Al Suhr, WB4AID, President; Frank Piverotto, WA4TBN, Vice President; F.B. Landy, W4OCM, Secretary; BobRoderique, WB4AIF, Treasurer; Mel Wrobbel, K4EBZ, Historian. March 1st will start the third year for the Society.
We were very sorry to learn that

Lewis Elam's mother had passed a way. Lewis, W4OJY will soon return to our meetings as one of our valued

#### HILLSBOROUGH AMATEUR RADIO SOCIETY, INC. WA4GJJ

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FSBEN - Thurs. 3940kHz 0030 GMT FAST Net Daily 3940 kHz 2300 GMT

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instructors. Lewis was also chair man of the nominating committee which included, Mel Wrobbel and Floyd Jones, WA4IXS.

Dick Kidder, WB4AKH, Chairman of the Technical Assistance Committee, reports one case of TVI which has been "cured" to the satisfaction of all concerned. This is a most important function of our Society and we are very proud of the work Dick has done in this connection.

Bob Roderique, is talking about his new 2 & 6 XMTR. Must be nice to shop at the super electronic market for gear. Don't think he can't built -Bob is really very clever with hand tools and has put several radio projects together.

So 73 for now and see you next month.

#### B.A.R.C. NEWS

Jim Wilson W4GDK

As we get ready for our 12th Annual Auctionfest to be held in Hollywood on Feb. 17 we can't escape a feeling of excitement about it. Our big assort ment of bargains always lures hams from all over south Florida and many winter visitors. We like it because it gives us a chance to meet many old friends and also many new ones.

The programs for our meeting on Feb. 14 had to be cancelled because of illness, but Tom Middleton WB4CKY brought a fine substitute talk. His subject was "Facsimile Transmissions" and he gave us some fine instruction on equipment he brought along. We have some very smart members and we're glad they share their knowledge with us.

The extra copies of our BARC bulletin which we are leaving in the various radio stores in the area are bringing to our meetings many hams who are unacquainted with our Club.

NORTH FLORIDA

AMATEUR RADIO SOC.

(A) DA R

W4IZ

MEETS 2nd THURSDAY

AT 7:30 P.M.

DUVAL CD HDQTRS.

107 Market Street

JACKSONVILLE, FLA.

We're glad to have them and hope we can make them feel at home.

The Broward Amateur Radio Club meets the second Wednesday of each month at 8 P.M. in the Broward County Medical Bldg., 2200 So. Andrews Ave., Ft. Lauderdale. This is just a block north of State Road 84. Coffee is served during the meeting.

It is hoped that at the March 13 meeting Ted Sprink W4AW will be able to give his talk on crystal production and their use in amateur radio.

## NIBER

By Howard Kelley, K4DSN

NOFARS are moving closer to getting a place they can call home. Landon Hoyt, W4PLE, has been working with the Jacksonville City Commission to obtain from the city abuilding that has been declared surplus and would be suitable as a clubhouse and station for W4IZ.

Many NOFARS and BARS (Beaches Amateur Radio Society) are meeting Tuesday nights at a Jacksonville Beach high school for classes geared to upgrade our licenses to at least advanced class. The project is one of the BARS and is being assisted by the Florida Junior College which is offering one hour of college credit for those who complete the course.

Jesse Morris, W4MVB, has agreed to head up W4IZ's 1968 Field Day efforts for the third time. Each time we've won under his leadership...so why knock it. And, besides, NOFARS have resigned themselves to winning again this year so we can keep the Florida Skip Field Day trophy.

EC John Witherspoon, W4GUJ, terms the Duval County Simulated Emergency Test a success with nearly 200 pieces of traffic handled and a high number of VHF mobiles working in the field.

Our February meeting took advantage of the rising sun spot cycle and invited two top DX'ers to prove a program on DX'ing from 160-meter to 10meters. And we had two experts in the field to do the job. Dave Hayden, W4-WHK, who lacks just one continent on 160 and who's a couple of countries shy of DXCC on 80 wetted the operating appetite of many with his accomplishments on the tough bands. George Werner, W4ORT, bedazzled and impressive array of hard-to-get wall paper that he has earned over the years running low power.

From one end of this country to the other, radio amateurs are getting together formally -- and very often informally -- to prepare themselves for the time when the first phase of incentive licensing goes into effect.

Already many Florida ham clubs have started theory and code-brush up classes. Hopefully all will be prepared when the F.C.C. examiner comes around or when one marches into his examining office in either Miami or Tampa.

The Beaches Amateur Radio Society (Jacksonville) recently got a class underway with an unusual twist. Not only do the attending North Florida hams get a chance to bone up on their license exam but if they complete the course the Florida Junior College at Jacksonville will give one-hour of college credit.

Some of the instructors come from the ham ranks, one or two from the junior college and for particular areas local engineers from RCA and Philco

at the Mayport Naval Base will drop in to lecture.

The class is taught in a high school one night a week. The 1967 and 1968 RADIO AMATEUR'S HANDBOOK is used as the text and homework assignments are in abundance. But, then again, there isn't much time. The FCC examiner will be around next month.

#### INDIAN RIVER NEWS

M. P. Earnhardt, WN4HNE

Congratulations to Dale, W4DQS, who just passed the extra class exam. Most of you may remember Dale as a former president of the Florida DX Club and our last year's field day man-

Bill Remaley, K4KNR, is in the middle of constructing a Heathkit SSB receiver. Bill is the type of guy who builds, checks and rechecks meticulously as he goes so it will work the first time he turns it on, won't it Bill?

O. B. Rawls, W4FXH, activities chairman, is designing the programs which are given at the meetings, to ward the amateur who intends to upgrade his license. Keep up the good work, O.B.!

The club has established a 2 meter net frequency of 146.5 Mg/Hz, and is in the process of acquiring crystals for the purchase by the members on this frequency. Also, the IRARC is considering the possibilities of 2 meter GM based upon acquisition of some surplus transceivers. Jim Bayless,

W4BAL, is looking into this. Well again I will say so long for now and 73's. Any fellow amateurs who are in the Cape Kennedy area are cordially invited to attend any of our meetings which are held at the Today Newspaper auditorium the 2nd Monday and 4th Tuesday of each and every month.

Happy DXing! Mike.

#### **ORLANDO RAMBLINGS**

Hal, W4BKC

The local Simulated Emergency Test with no advance information on test situations, produced some interesting results. A simulated tornado apparently blew down all antennas, electric wires and forced all mobiles off the road in the designated area, as there were no reports from that area for the duration of the test. In another area an overturned tank truck containing a volatilelethal chemical was very realistically handled by the Radio Officer and the Fire Department. Of course we realize that in the event of a real emergency we would have had more stations on the air-but on a nice Sunday afternoon - we were real pleased to have fourteen stations check in with net control. With these stations as a nucleus, the entire complement could have been alerted in short order, which is real encouraging to a new E.C. Many thanks to all who participated.

Code and theory classes are being conducted on two meters, 145,350. The code portion on Monday nites, 7 to 7:30 by W4BKC and the theory portion on Thursday nites, 7:30 to 8 P.M. by W4PAO, with assistance on video for those who have converters, by W4TOD and WB4AKJ. The only requirement for the theory portion is the new License Manual which is being used as the standard for the Q & A. So if you are going for the Advanced class -or just want to see how much you've forgotten, listen in. If you don't have two meter gear look up a ham who has -

Hickory, N.C. 28601

WA4-WB4-WN4-QSI Bur. DICK TESAR, WA4WIP 2666 Browning Street Sarasota, Fla. 33577

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Don't forget the date of the Orlando Hamfest - April 27-38 and the place, STATLER HILTON INN, formerly called the QUALITY COURT MOTEL. Address is 3200 West Colonial Drive.

#### **FLORIDORA NEWS**

Cathy Soehl W4BAV

S.O.S. Floridoras! Your Nominating Committee has worked very hard to present a slate of officers for 1968. PLEASE mark your ballot and return immediately, as they must be received in the mail no later than March 31; and be opened and counted at the an. nual meeting at Orlando Hamfest, April 28th.

W4EHN-Betty and OM-Clem Coleman celebrated their 48th wedding anniversary, Jan. 10th, mobiling to Sanibel Island to visit friends and enjoyed a swim while there, among other ac tivities. Betty is studying for her extra class license and also having fun with her new Heathkit Phone Patch.

WN4FSF - Bonnie Weiboldt, who joined us at the Orlando Hamfest last year, has passed her General Class License.

WA4BMC-"Big Mike" Eggert enjoyed a visit from K2LMS-Alice Wernsing, of Luzerne, N.Y., who joined the ham fraternity when she was 64 years old; she does not like cw, but likes to build her own equipment.

W4UF-Dot Saunders is happy with her new Eico Keyer, which works nicely with her KWM-2. Dot contacted ON4RDX, OM of ON4AD-Jane (our DX adopted), reports all well with

W4WPD-Shirley Hill and W4BIL-Fran Foley have received their 15-year YLRL Continuous Membership Certificates.

W4BAV-Cathy Soehl has been appointed ARRL Assistant Director Southeastern Division, by Director W4LVV-Chuck Bolvin. Will be glad to assist in getting interpretation on any rulings; any gripes, etc.

#### FLA. VHF SIDEBANDERS

By R.D. Ralston-K4LFF

Getting a column started this month has been quite a chore. Activity has been lousy most of the time due to all the noise many of us are experiencing. When you get a 10 or 20 over 9 noise, it does make it rough to copy a signal that might run S 4 to 5.

I have been hoping for some comments from the readers of this column so I could have more to write on, but it looks as if every one is either bashful OR no one is reading it. As I have mentioned to many of the members; I am open for all suggestions, whether I agree or not. This is your group, not just mine, so how about dropping me a line once in awhile.

Maybe some one can explain how my 14 year old son's white mouse 'Sam' got out of his cage turned on the rig, and caused TVI (using my voice), while we were up in Georgia last week. I guess you can't win them all.

Stopped in to visit Jerry, WA4TST. and found him out of town, and when returning home I found a note that W4-DPH had been to see me. We did get together on Sunday and drove over to Winter Haven to Carl's "barn" (WA-4LQE). Many of the members are also in the new MARSSSB net that meets 3 nights a week on 49,980, anyway, I think all the one's present at the meeting enjoyed themselves. Especially

the coffee and cake served by Carl's XYL and assisted by Karine (WB4G-

ZN) and Glenda (XYL of WA4UYC). Bill (WB4HAN) reports that he is returning to the Axores and hopes to get a SSB rig on from there (if he can operate on the base). He was not a ham when he was there before, so is not up on their rules and regulations. We also hope to have more info soon on various DX countries to listen for, and also where to look for them. This might be the last chance for real DX on 6 for quite some time.

#### SUNCOAST ROVING REPORTER

CATHY SOEHL W4BAV

SPARC held their Installation Dinner, for officers mentioned in January column, at the Sand Dollar Restaurant with about 75 in attendance, W4JOU-Bob Spiers did his usual good, humorous job as Toastmaster. Sorry W4WME-Bill Foley (outgoing pres.) W4TDK-Naomi Spence & K4KKK-Jim Clark could not be present to be installed, due to the "Flu Bug." Marshall Cleaver, of "Open Mike" on Channel 10, gave an interesting, illustrated talk on UFOs (Unidentified Flying Objects). The results of investigations by the National organization "Nite Cap" are fantastic and gives one "food for thought".

W4NOK-Jack Adams will be heard mobile soon as he is installing his Christmas present, an SBE 34 after having his car painted.

W4BAV-Cathy Soehl has been appointed Asst. Director S.E. Div. ARRL

by Director W4LVV-Chuck Bolvin. Sorry to hear W3BP/4-Herb Weston member QCWA Gator Chapter, is in Broward General Hospital, Ft. Lauderdale, trust surgery will not be

necessary.
W4PWB-Walt & XYL, K4CSC-Edna Wentworth sailed Mar. 3rd on the "Leonardo Da Vinci" for an 11 day cruise, visiting St. Thomas, Martinique, Curacao, & Montego Bay. 'Uncle Walt" is a professional square dance caller, with over 17 years experience, & every year he & Edna conduct a tour such as this for the

Square Dance group.
The QCWA Gator Chapter members are looking forward to luncheon & a tour at MacDill AFB, on March 23rd. The Gator Chap, was organized Nov. 21. 1966 & has a current membership of over a hundred.

WA4ILD - Leonard Springer had quite a job figuring out how to dispose of a spider & web lodged in speedometer of his car.

#### WESTERN FLORIDA NEWS

Frank M. Butler, Jr., W4RKH

Pensacola: The Five Flags A.R.A. now has its own quarters at the Red Cross office, and a Clegg 22'er, loaned by K1ZKR/4. WA8SQG/4 is moving to Milton. Five stations are active on the 145.2 Mc net. W4UUF was ap pointed VHF-PAM and OVS. Pass your VHF news to him for relay to S-CM. W4BNR/4 improved his signal on WFPN with a new 75m antenna.

Fort Walton/Eglin AFB: The EARS station, W4SRX, is back on all bands with the erection of a tri-band beam. On three occasions they have relayed emergency traffic from Latin America to Miami. EC WB4EER conducted a surprise SET drill on 145.2 Mc. Twelve fixed stations and 3 mobiles took part.

Defuniak Springs: K4KHV/4 is now equipped with 2 KW of emergency power.

Panama City: Bay County CD moyed their 2m net to 145.2 Mc. to be compatible with other NW Fla. counties. They had a FB SET drill emphasizing mobile units.

Port St. Joe: EC K4RZF installed antennas for 75 and 2m at the new County CD Hq.

Tallahassee: W4JGD was appointed ORS. He acts as liaison between QFN and WFPN.

Cross City: K1FVW/4 is stationed here with the USAF; he runs 200 watts to a vertical.

#### **GAINESVILLE NEWS**

Mack Tyner, WA4SXD

Well, through the hard work of Lamar, WA4FLJ, and Cecil, K4RZO, who built it, Gainesville is finally going to have a two meter repeater. It is presently in temporary operation at Lamar's home in Hampton, and is tentatively scheduled to be installed at Alachua Co. CD headquarters, with its antennas mounted on the 160 foot tower on the courthouse. Input to the rpeater is 146.34 Mhz., with output on 146.-

The club's theory and code classes will start early in March. They will be held in the courthouse basement, probably on Friday evenings.

The SET exercise was a success in the eyes of everyone including ECW-A4UFO. Jack reported participation by 12 mobile units and four base stations on emergency power, for a total of 247 points. One of the highlights of the exercise was a simulated fire at CD headquarters which necessitated moving control of the nets to WA4S -XD until the situation was brought under control. Some of the damage from the simulated earthquake was felt at WA4BMM's animal hospital. Doc reported that all of his dogs had escaped and several mobiles were dispatched to the scene to round them up. We were all rolling in the aisles for a while, and everyone who participated had a grand time and gained valuable experience too. The most important aspect of SET was that we found exactly where the weaknesses in our CD organization lie, and also stumbled on some effective means of correcting them.

Doc Sanders, WA4BMM, informs us that 6 meter FM activity on 52.525 Mhz is really booming, with several new Jacksonville stations making good use of the repeater mounted on his tower at Archer.

And guess who is starting to get ready for field day already?

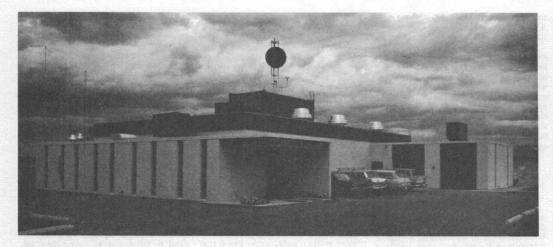
#### LAKE AMATEUR

By Zach Bruce WA4TJS

It seems to me that the past Simulated Emergency Test of 1968 was a complete success. The LARA participated Sunday afternoon for about four hours at the Leesburg Fire De-partment. We operated the Lake Emergency Net on 50.472 Megacycles Narrow Band FM, in conjunction with the Florida Amateur Sideband Emergency Net on 3940 KC. Those LARA members participating were: Henry Suttkus, K4AOB; Wm. C. Davis, K4U-YN; Zach Bruce, WA4TJS; D.A. Mc-Clellan, WB4DPD; Howard Harris, W-

(Continued on Page 10)





THANKS TO Hugh J. Stewart, writer-editor, Technical Information Office, NBS at Boulder, Colorado for sending us these excellent WWV photos. Here's the WWV transmitter building at Fort Collins, Colorado, The Microwave antenna transmits WWV signals to the Radio Standards Lab in Boulder, 50 miles to the south.

(Official NBS photo)

#### **BACKGROUND INFORMATION**

## WWV, Pioneer in Standards Broadcasting

Since WWV was established on the old NBS, Washington grounds, in 1923, it has grown from a 1 kilowatt station, serving only a score or so of users. to a station broadcasting at powers up to 10 kilowatts on six standard frequencies simultaneously. Its listening audience who use its services is now estimated to be greater than that of any other radio station in the world. It ranges from hundreds of thousands of amateur radio operators around the world to Federal agencies such as FAA, the Department of Defense and NASA, to the radio and T.V. broadcasting industry and man-

tronic equipment and musical instruments, to air lines, steamship lines, and public service companies, and finally to private, industrial, university, and governmental research agencies.

WWV broadcasts eight kinds of service: standard radio frequencies simultaneously on six on the air in its place simultandifferent frequencies (2.5, 5, 10, 15, 20, and 25 megacycles per second, standard audio frequencies (1000, 600, and 440 cycles per second), time intervals (the second, minute, and hour), Greenwich Mean Time given by voice announcement, Universal

ufacturers of sensitive elec- Time in International Morse Code, daily differences for epochs of UT2, forecasts of radio propagation conditions, and geophysical alerts. 1\*

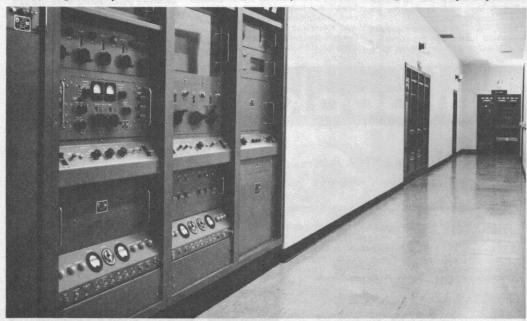
> When the old WWV station went off the air at Greenbelt, Md., at 0000, Dec. 1, 1966, the new WWV at Fort Collins came eously.

At Fort Collins, WWV has as neighbors the two NBS lower frequency stations, WWVB (transmitting at 60 kilocycles per second) and WWVL (trans mitting at 20 kilocycles per sec-

ond). Broadcasts from all of these stations are referenced to the NBS Frequency Standard or "atomic clock" at the NBS Radio Standards Laboratory at Boulder, Colo. Each station relays the time of its master clock each day by microwave to the Boulder Laboratory where it is compared with the NBS time scale. The observed discrepancies are usually less than a millionth of a second.

Most North American users now get better reception of WWV broadcasts from the new facility than from the former transmitter at Greenbelt, Md. Also, the transmitted frequency and time standards are more accurate because of the new sites proximity to the NBS Radio Standards Laboratory at Boulder, Colo., where the NBS standard of frequency and time (the "atomic clock") is kept.

The move of WWV, long planned to consolidate NBS broad cast facilities and improve service, was made possible by a 1964 Congressional appropria tion of \$970,000. This sum covered the costs of moving equipment, replacing out-of-date equipment with new equipment. and constructing the antenna system and building. The Technical Material Corporation supplied the eight transmitters for the new station. The Collins Radio Company provided two monopole antennas and 88-foot steel towers, and the Rhon Manufac turing Company furnished the remaining six antenna towers. Ditzen-Mueller and Associates, Boulder, Colo., architects, designed the transmitter building and the administrative wing. W. K. Livingston of Fort Collins, Colo., was awarded the construction contract in April 1966. and construction of the new building was completed in October 1966. Installation of the



ONE OF WWV's 40 KW T, M.C. transmitters used on 5, 10 and 15 MHz. These transmitters run at half pow-(Official NBS photo) er. This view shows the north corridor of the transmitter building.

8 / FLORIDA SKIP March 1968

transmitters and associated equipment was completed in November 1966. Plans have also been made for castastropheresistant power service.

#### PLANNED WWV FACILITIES

The new WWV building houses eight transmitters and administrative and work space for a staff of 12 engineers and technicians. It has been built into the side of a hill in order to have the least possible effect on the radiation pattern of the radio transmission emanating from the antennas surrounding it.

Four of the transmitters are designed to power an antenna radiating at 20 kilowatts: three of them are used for transmissions at 5, 10, and 15 megacy cles per second; and the fourth is used as a standby transmitter. High equipment reliability is obtained by using the transmitters to radiate only 10 kilowatts on each of the three standard frequencies, a slight increase over the past power emissions. The other four transmitters are rated at 5 kilowatts and are similarly used at half-power to transmit 2.5 kilowatts at frequencies of 2.5, 20, and 25 megacycles per second, with one transmitter being held as a standby.

The six single-frequency antennas normally used are grouped around and above the transmitter building in such a way that there is negligible "shadowing" of any antenna by the others. This makes possible omnidirectional radiation pattern for each of the frequencies broadcast. The antennas used were designed by the Antenna Section of the former NBS Central Radio Propagation Laboratory. Only one tower is required for each antenna; the highest is 200 feet and the lowest, 20 feet.

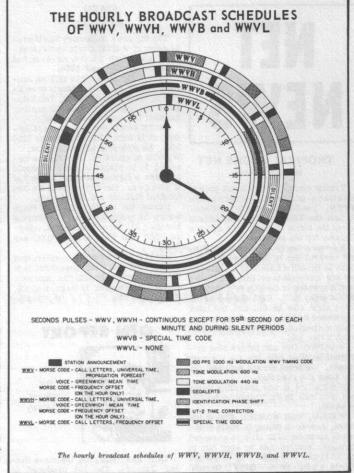
Standby capability is provided by two identical monopole antennas on 88-foot towers; these general -purpose antennas are effective over the entire range of WWV frequencies. They can be used for operation with nearly equivalent efficiency when any of the six regular transmitters or antennas is out of order or is being serviced. Each of the antennas is connected to its transmitter by coaxial line for maximum reliability, ease of matching without special networks, and wind and ice resis-

Planning for WWV installation has included alternative sources of operating power to assure continued operation regardless of weather. Power is obtained from the Poudre Valley Rural Electrification Administration through underground lines, one from a substation to the northwest, and one from a substation to the northeast of the site. A diesel generator capable of running WWV is available for temporary hookup if every necessary.

#### TECHNICAL INFORMATION

Technical information about the services of NBS standards stations WWV, WWVH (at Maui, Hawaii), WWVB, and WWVL can be obtained from NBS Miscell aneous Publication 236, Standard Frequency and Time Services of the National Bureau of Standards. The 1967 edition is available from the Superinten dent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 at a cost of 15 cents. Occasional changes in these services are announced in the NBS Technical News Bulletin, published monthly and also available from the Superintendent of Documents at a cost of 15 cents an issue, or \$1.50 a year.

1\* IGY world warning agency, NBS Tech. News Bull. 41, 65— 66 (May 1957).





I'LL BETCHA YOU NEVER saw anything like this before. Assistant engineer in charge of WWV, Bill Dirks, adjusts one of the automatic voice announcers for WWV..."When the tone returns, the time will be..."

(Official NBS photo)

## NET NEWS

#### TROPICAL PHONE NET

By Ken W4SMK

Traffic continued at a brisk pace in January and early February on the TPTN. The SW Fla. Fair in Lee County and the Tampa Fair should help boost the totals in Feb. See W4MVB's Column for the standings.

We were sorry to lose W4NGR as net control due to the press of business in beautiful Lake Mary. However we are fortunate to get Rich WB4EPD, in Clearwater to take Case's old spot on Saturday NCS. Rich started out the first night like an old pro, but later confessed he had a touch of the flu. Nobody suspected, however, since he did such a fine job.

WA4TWD Jim and others also reported battling with the flu the past month. We trust all are well again by the time you read this.

WB4DDO/4 is now operating under his own call in Ft. Pierce instead of W4AKH.

W4DFU, with WA4DEL Jim at the mike, has been filling in some of the blank spots as NCS. Jim is an ex-net manager and we like to keep him in practice. I wonder why he always wants a patch from WB4EPD though?

Some new additions to the TPTN roll call are WB4GEC, Mike in St. Pete, K4LEC Dick in Jax, K4NKAJohn in Stuart, and WA4ZAZ Wally in Bradenton. Welcome all. Glad to have Chet WA4LRW in Ocala back with us, also. If we keep this up our roll call may be as long as the Fast Net some day.

W4DUE says he is retiring soon and will be touring the State to visit all the net members. You fellows be on your best behavior when Preacher comes around now.

We hope you read our little articles on traffic nets and net controls in the last issues and perhaps this issue of Skip. We feel that Section nets are the training grounds for traffic handlers, and don't intend to get fanatic about procedures. At this level it is possible to handle traffic and still not be to stuffy. Emergency nets and higher level nets are something else again, however, and if you cultivate good operating habits on your section nets they will carry over if you participate in the "pro leagues." Keep the traffic coming.

OLDEST PHONE NET

## KNIGHTS of KILOCYCLE

SUNDAYS 3910

7:30 A.M. Nov. to April 7:00 A.M. April to Nov.

#### **FMTN**

By W4AKB

The big news in January was the reelection of W4SDR Clyde as Net Manager and Herb K4DAX as Asst. Net Manager for the year 1968.

FMTN participated in SET on January 27 and 28. Net controls were K-4DAX, W4AKB and W4SDR. Total stations checking in were 69 and they handled 125 formal messages.

FMTN meets every day except Sunday, at 12 noon EST or 1700z on 7230 khz. We welcome all modes, AM, C-W, SSB to check in. Any station desiring to be placed on the roll should address a formal message to the Net Manager. He will see that the Net Control Stations are all advised.

During the month of January there were 28 sessions with 778 stations handling 515 formal messages, Average QNI was 27.8; average QTC was 18.4.

Again it is a pleasure to advise that during 1968 your Net Manager is Clyde W4SDR, Daytona Beach, Fla., and your Asst. Net Manager is Herb, K4DAX, Bradenton, Fla. 73, Charlie

#### **QFN REPORT**



By Bob Blumberg WA4OHO

QFN was really on the move during January. The Set produced an extra 248 messages for QFN, which were handeled in 380 minutes for a very high and efficient rate of 0.652 messages/minute. QFN held an extra 23 sessions for the SET, using 4 RN and RN5 liason stations.

Overall statistics for the month of January show that 69 different stations checked in for a total ANI of 976, handling 666 pieces of traffic in 1280 minutes for a fine overall rate of 0.520 messages/minutes.

Special thanks is extended to all who participated in the SET and especially to those who acted as NCS or as a regional net representative, and to K4YSN who proviced regular liason with the SSB nets.

Anyone desiring a QFN net certificate, please ARL-7WA4OHO, if you have not already done so.

A high percentage of all the out of state traffic originated in Floridawas channeled through QFN. If you are not already a member of QFN, why not join us on 3651 kc/s daily at 2330 and 0300 Z? We in vite everyone. Your code speed is irrelevant, for everyone will adjust for you. CU on QFN!

#### **FLAMINGO NET NEWS**

By W4EDP

This report will have to cover two months as the reporter missed the deadline last month; so we will squeeze a little this month.

Ten meters has really been good and it is getting better all the time. As an example: during the roll call on Feb. 2 we got a call from VE5SW at about 8 P.M. Before he knew what had hit him he had worked ten stations in the Flamingo Net and earned himself

#### **CLUB NEWS**

(Continued from Page 7)

A4MIH; Irl Ball, K4URA; Sid Tomlinson, WA4YAI; Martin Kirkland, W4-ADB; Claude Conklin, K4LPS. This year the LARA tried something new, and that was to incorporate the C.B. fellows into the S.E.T. We had complete cooperation with these people, and they handled themselves very nicely. We operated on C.B. base station with the W4YKY net control, and they had four mobiles of in Leesburg. The K4AOB/4 station in Groveland had a C.B. base station and 2 mobiles, The C.B. fellows helped to round up information that otherwise might have been greatly delayed due to a shortage of

a certificate that very few Canadians have. His signals were strong and consistent throughout all the QSO's and gave everyone in the Net good reports, even W4LIH running 18 w. mobile was copied in Canada 5 and 7. If you are not working ten now, get on the band wagon and have some fun. Ten is one band on which there still is a lot of AM operation so if you are not rigged up for SSB you will feel at home on ten.

Had a hidden transmitter hunt a couple of weeks ago with W4DTJ the hidden one. The scallewag found a spot that would give a lousy signal strength reading when you got close to him on his rear, but would give a good read ing when you were out in front of him for quite a distance. The trick was that he could not be seen from his front because of his location. There were no roads that led to his position from the front, and he could not be seen from his rear even though you could drive to within 50 feet of him. W4MNN rooted him out in short order, however. Hidden transmitters can't hide from intensified Charlie!

About out of space again, so will say 73 fer now and hope to see you on the Flamingo Net Friday at 730 P.M. on 29.044 Mcs.

LARA mobile units on the Lake Emergency Net. I personally feel that the C.B. people can help in an actual emergency. Other clubs might try them sometime in the future to at least see if they will work out.

As far as I know, there is only one ham in Lake County who is still on Ancient Modulation, and that is Gus Goings, WA4CPL. Recently Tiny Smith, W4BP bought a SB-401 SSB transmitter, and that leaves Gus to his little ole lonesome. Reid Martin, W4VDY has been giving Gus some static at recent meetings, in fact, Reid organized the H.G.G.G.S.S.B., which stands for "Help Gus Goings Go Single Side Band." I don't know whether he will or not, but it should prove interesting.

At the LARA club meeting, we had an extremely interesting talk on Radio Teletype by John Peterson, WA4NWM. Pete gave the principles of teletype operation, and a brief history of RATT. To my amazement, Teletype has been in operation since 1849. (NOT RADIO TELETYPE, BUT LAND LINE TELETYPE).

For those interested, the LARA published a s mall newspaper every two months called the HAM SALAD. Any reader of SKIP wishing to have a copy of HAM SALAD, please send me a 6¢ stamp and I will be glad to mail you one. My address is: P.O. Box 1328, Leesburg, Florida 32748, I will be very happy to send you a copy.

I recently discovered that there are a lot of hams in Lake County I never heard of. The total as of January first was 99 hams resident in Lake County, with 7 members who live here part of the time and go north in the summer.

Well, I guess that's about all for this month, hope some of you will come to a LARA meeting sometime in the future.

(Continued on Page 12)

#### TOP TWENTY TRAFFIC TAKERS

Each month we are happy to list the top 20 Florida traffic takers. We hope to see your call here next month.

1.	W3CUL/4	BPL	1754	11.	K4YSN	218
50000	WA4SCK	BPL	606	12.	W4FPC	209
100000	WB4EPD		435	13.	W4IKB	197
0.715	K4VFY		426	14.	W3VR/4	175
5.	W4ILE	BPL	359	15.	W4SDR	149
6.	WB4AIW		334	16.	W4SMK	142
7.	W4FP		276	17.	K4LEC	137
8.	WA4WZZ	BPL	262	18.	K4EBE	119
9.	WA4FGH		230	19.	W4BVE	116
10.	WA4NBT		224	20.	WA40HO	108

#### TRAFFIC HOUNDS

By Jesse H. Morris, W4MVB

NET	QNI	QTC	SESSIONS	AVG QTC
QFN	976	666	83	8.02
GN	332	168	62	5.4
FATT	161	38	31	1.3
WFPN	761	94	31	of Side of marketing
FMTN	778	515	28	18.4
TPTN	719	301	26	11.6
SATN	122	83	25	3.32
FPTN	479	136	28	5.0
FAST	1022	193	27	7.1
FSBEN	255	268	2 (SE'	T) 134.0



By AFB4JTK/AFC4BND

A few thoughts about the new tactics being brought into use on Area net 4416 khz. We feel that they are being implemented with the thought that it will be another step forward in AF Mars.

Sorry to say we do not see it

EACH

9 A.M.

TUESDAY

different about the new method Directors. is to increase the work burden and paper work on a few volun teer net control stations and net managers, without an apparent reason. That is, unless we have gone back to the old system whereby the projects worth was measured by the pounds of paperwork it produced. Were this the only objection, we would not be bothering you with these comments. However, we feel it shows a lack of confidence in the whole civilian part of our program, and reflects directly on

We dislike this creeping Military procedure sneaking up on us. It might be well for the powers to consider the fact that we are participating in this program on a basis of wanting to help, aid and assist, not having to BY ORDER.

AFB4LHX relates this to us. One night he was awakened after having a few before bedtime. He looked out his bedroom window and backed away. Rubbing his eyes he looked again and said, "I don't believe it." His wife, Eileen awakened by the noise looked out the bedroom window and said "do you see what I see." Stan replied, "You mean I'm not drunk, there are elephants out there eating my beams?" It seems that some elephants had escaped and were

this way. All that appears to be the competence of all the State in the area. They ate some plants and did some minor damage to his beams, but Stan will not have a few more before bedtime for some time.

> AFB4UKO is back in the fold again. He was away for some time and did return to Area net as Transcon agent. Al we're sorry that you had so much trouble with your equipment. Sure hope that all will be OK in the future.

> The Orlando Hamfest will be held on 27 and 28 April at the Quality Court in Orlando, AF4-OPR says that he hopes to have Lt. Mehnert there and AFA4GXJ the Area 2 OPS Mgr says he will try to be there also. They have reserved a meeting place for AF Mars and we hope the attendence will be a large one. This year he hopes to make it a State af fair instead of just and Orlando affair.

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#### CLUB NEWS

(Continued from Page 10)

#### SO. MIAMI RADIO CLUB

By John W4NE

At the 2nd January meeting the following officers were elected for 1968: Ray K4EHQ President; Jim WA4KIL Vice Pres.: Claude WB4CTD Secretary; Jerry WA4WUD re-elected

President Ray's first official action was to request Ernie K4KIC to continue the excellent job he has done for several years as chairman TVI committee. Serving with him will be Jim and Jerry WA4WUD and WA4KIL Charlie WA4RSX. Mel WA4EVX accepted chairmanship of the program committee; an assistant or two are yet to be appointed although the entire membership is asked to cooperate in suggesting or obtaining program ma-

Membership committee will be headed by Charlie WA4RSX with help from Sandy WA4KSD and Max W4M -EA. At our Feb. 8 meeting an interesting talk was given by a new member Jim W4ZIT which he titled "Real Dx the Hardway with 5 Watts on 40 Meters." Jim was a member of a 12 member team in the military "Special Forces" during the late 1950's serving primarily in Laos. His introduction to the jungle areas of Laos was by parachute, their only equipment ar-riving the same route. Included was a military small CW transmitter and receiver power by hand cranked generator. When other activity per mitted and a willing generator "cranker" could be found, Jim tuned the equipment into the 40 meter band and indulged in some interesting and unusual QSO's. He reported that in some locations he found the most effective height of his "twin lead" antenna was just 4 feet off the ground.

Next month we hope to give a better report on club and member activity. In the meantime, come visit with us, usually the first and third Thursday of each month at the Industrial Arts Bldg. on the NE side of Ponce Jr. High school opposite University of Miami on US #1. Bring a long another ham or friend for an eyeball

QSO with our gang.

#### FT. MYERS CLUB NEWS

By W4SMK

The December club meeting on 29.0 Mc. turned out about half a dozen stations. Some of the rest of us still need crystal and other gear to get on the frequency.

The January meeting was abbreviated due to the cool weather, so hope to get going again in force this month. The Simulated Emergency Test in late respectable signal. One of these days January was followed immediately by the SW Fla. Fair, and there was amateur activity in both events. A dozen stations took part in the SET which came at a new time this year. Some of these same people will be helping in the Edison Pageant Parade on Feb.

The SW Fla. Fair operation was organized and headed up by G.E., WA4-DQE/AFB4DQE again for the second year. He moved in his communications trailer with RTTY gear and a Collins station on the MARS voice frequencies. Some 570 pieces of traffic were originated in the week long fair. Most of it went via teletype on the M-ARS frequencies, with some being handled on the amateur bands.

G.E. and his Dad WA4JOF did the lion's share of the work, aided by some of the other Shriners who sponsored the fair. Other amateurs who assisted were WA4HDH, W4CQZ, W4KET, W4SMK, WA4HXY, and WA4LFZ. The fair set a record for attendance this year, although we don't compare with the big State fair in Tampa and the activities at W4DUG

W4LNE will be headed back to sea soon again. He is proud of his linear amplifier he picked up in Japan at a bargain price. Listen for him maritime mobile soon.

W4PJG joins the author's club along with K4FQU and W4SMK. See Lou's articles in 73 magazine.

W4SMK finally got a beam back up on the tower. Not the three element quad, but a very conservative tri-band Yagi again.

WA4LFZ, our club President, is the proud owner of a new Heath Kit station that he is putting the finishing touches on. His son recently extended his Viet Nam tour, and Howard hopes to talk to him via the MARS phone patch frequencies.

#### DADE RADIO CLUB NEWS

By W4EDP-Jim Bonnell

Things have been moving smoothly for the Dade Club. Seems odd not to be sweating out the Hamboree this year after working on it every year for so long, but restful.

Due to the heavy load of activities at the Museum we are unable to hold more than one meeting a month ther, so the second meeting of each month is being held at various QTH's till a regular place is available. We have been meeting at the home of Chuck Bolvin, W4LVV thanks to his generosity. At the last meeting Chuck had a schematic of a simple SSB transmitter of the phasing type that uses only two tubes. Looks like it could be built from any junk box worthy of the name. No bandswitching, ALC, VFO or other accessories, but it should put out a

when I get the station rig running the way I want it to run I will build the thing.

We have a very interesting program lined up for the March meeting involving communications satellites. couple of years ago we had a similar program outlining the work that had been done by airlines using satellites for communication from plane to ground. This program will take up where the last one left off. Sounds like it will be very interesting.

Hope to see you all at the BARC auc-

#### VERO BEACH ARC

by WA4QVJ

It has been a long time since VBARC, Inc. was heard from, the young fellows either going into the Armed Forces or off to college. However, we will try to bring things up to date.

First, our club recently voted upon and adopted a new Constitution and By-Laws to guide us in the future. And one of the changes from this resulted in changing our meeting night to the 2nd and 4th Thursdays of each month. We are also in the process of affiliating our club with ARRL.

At our last regular meeting, 25 January, 1968, we held our annual election of officers, and the following members were elected:

Pres. George V. Cooke, Jr., W4LEP V.P. Herman Owen, WB4ABX, Sec'y Graham Lowe, K4EL, Treas George Jones, WA4QVJ. Good luck to all the new officers for the ensuing year.

As we all know, S.E.T. (simulated emergency test) was held on the 27 and 28 of Janyary. As usual, our E.C., Irving J. Rovang, better known to us all-alywhere-as "IJ" and who put Indian River County third in the

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astian, Florida, and Richard Jackson, WA4RQB operating from emergency station #3. They all passed traffic on our 2 meter Net. This writer passed 14 to W4DFZ who still has a cramped hand, and remarked I shouldn't call IJ a slave driver anymore, Hi! Some couldn't make it due to being out of town or being previously commitof town or being previously committed such as Tom, W4KEE, Jim, W4-MBR, Bob, W4ZGG, Herman, W84-ABX, na dConnie, W84COM.

At this time, it might be proper to mention that our new president George V. Cooke, Jr., W4LEP, not

too long ago, moved to Vero Beach from Long Island, N.Y. where he had the call letters of W2OBU and was SCM and Director. ARRL, Hudson Division. Now that all this activity has passed, IJ again back pounding the brass as they say, BPL and he will be trying to raise his count even higher. As Arthur Godfrey would say, "When you reach the top, there's no place to go". George Cooke getting ready to take over his responsibilities as President of the club and already talking up "Field Day" exercises in July.

Thanks to Grover, W4DFZ for assisting this writer in my first assignment as a correpsondent for Skip. representing the Vero Beach Amateur Radio Club Inc.

#### **EGLIN AMATEUR RADIO** SOCIETY

By Donnie-WA4LBM

Once again amateur radio has proven it's value to the public in times of natural disaster. On the morning of Dec. 10th a violent tornado swept through the Fort Walton area inflicting heavy property damage to homes and businesses.

Local amateurs of the Eglin and Ft. Walton Radio clubs quickly responded and mobile on two meter FM aided local authorities in patroling stricken areas until National Guardsmen could arrive.

After these areas were secured they assisted Red Cross in handling the large volume of welfare requests and reports which began to pour in. Total traffic count after the smoke cleared away was well over the 1000 mark. It was a real service provided for the community. Well done for all hands.

(Editor's note: WA4LBM just advised us he was leaving and this would be his last column. See Letter to Editor.)

#### SET REPORTS

Here at deadline time (Feb. 10th) we have only the following Net & EC SET reports: (For Jan. 27 and 28th)

FAST: QNI 255 QTC 268 QFN: QNI 169 QTC 248 796 points

TPTN: QNI 21 QTC 57 (1 hour) 174 points.

Orange Co: W4BKC - 338

Hillsborough Co. W4KRC -227 points.

St. Johns Co. WA4EYY -193 points.

Polk Co. W4FP - 332 points. Dade Co. W4FHZ - 287 points. Duval Co., W4GUJ - 369 points. Indian River Co. WA4SCK - 104 Lee Co., W4SMK - 99 points

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#### LETTERS TO EDITOR

(Continued from Page 2)

one year of reading SKIP, I'm so sold that I want to get it for at least FIVE more.

Although I spend most of my time on 20, 15, and 40 meters chasing DX, I am interested in what's happening to ham radio statewide. I read each is sue cover-to-cover, and agree with almost all statements. (ExceptQFN-tried it, got cold shoulder, dropped it. Darned clannish, those nets!)

Darned clannish, those nets!) Still enjoy SKIP, however, and will continue to look forward to it monthly. Very 73!

Sincerely, "Trace" Levy, W4FRO VP, Fla. DX Club

I am a subscriber to your fine publication, and I am especially enjoying the February issue. I think that stories of amateur teamwork, as the Ft. Walton Beach tornado report are most expressive of the traditional amateur spirit, and do much in the way of favorable public recognition.

As I am yet a Novice, I haven't had much chance to operate fone or do much traffic work, but just from listening, I believe that the great majority of operators today are living up to the high standards of the tradition, and only a few are worth complaining about.

Criticism is very good in its place, but let's keep it constructive. I have found that most operators are setting a good example to we Novices, as should be done to keep our standards of operating high.

I think that amateur radio is the greatest, and I am going to try for the General class soon. So thanks again for such a nice publication, which I know must take a lot of time and effort. Just know that it's appreciated.

O, please send me one of the 1968 Florida Skip calendars, and the envelope is enclosed.

Gary A. Forehand WN4HOF - Miami

Dear Andy:

Enclosed is the first in a series of articles on the integrated circuit. I hope that this material is not too deep for our fellow readers, although I plan to keep it on the "ham" level. I would like to call the column, "TO-5 AND SMALLER". This, of course, refres to the small world of the transistor along with all its brothers and sisters. Hi!

Please find a check for \$2.00 for the year subscription. I might add that having not seen the FLORIDA SKIP for over three years, you certainly have done a marvelous job. I am delighted to see the paper as big and impressive as it is.

If there should be any requirements that I have not met in writing the article, please don't hesitate to get in touch with me. If you have any suggestions or comments, I would like them as well.

Thank you the opportunity to write for the FLORIDA SKIP.

Sincerely and 73, Thomas De Bray K4KRJ Ft. Lauderdale

Editor SKIP:

Sorry to say my career as a journalist will be extremely short-lived. I have received my orders to go to Southeast Asia, so won't be able to submit any more articles for the EARS club.

If you would please put the article I submitted for last month's SKIP in this next time. And if you see fit perhaps an editor's note of explanation and give my regards to all the Fla. gang. Will try to keep in touch from time to time.

We will be going to Thailand, and even though I know it's practically impossible, I will try every channel available to get permission to operate from there.

So Andy take care, and will be seeing you in a year or so.

73, Donnie Wright WA4LBM

Editor:

During the recent simulated emergency operations of Civil Defense (held once or twice each year), there was considerable QRM from many AM as well as SSB stations, either operating on, or near the designated RACES frequencies.

Many of the AM stations were improperly operated, in that the finals were being over driven resulting in broad QRM. As a matter of fact, some of the AM stations splattered as much as 8 kc. The RACES frequencies for the State of Florida are 3990.5 LSB., 5548.5 CW & RTTY; 7254.5 LSB., 7121.5 CW & RTTY; These, and other RACES frequencies are clearly outlined on page 3 of the Emergency Communications manuel put out by the ARRL.

During the operation, several Florida AM stations were kindly asked to QSY in order that we might carry on with simulated emergency communications. Some of the replies were "What is Civil Defense? I have been operating on this frequency for the past several years and I am not about to QSY" Even when advised that the station was splattering 8 kc up and a request was made to reduce the audio drive - "I couldn't care less about your simulated emergency communications."

Any respectable Amateur would certainly QSY when requested to do so. But some of these old timers could not be moved with a ton of TNT.

Of course the operations were simulated and not real. Had it been a real natural, or man made emergency, had any Amateur Station refused to cooperate when requested, some licenses may be revoked.

Mack Britton, W4DVR Central Florida C.D. Area., Wildwood, Fla.

Editor:

Here's my \$2.00 for another year of the greatest little magazine in ham radio. I look forward to each issue and can't wait to read it when it comes in so keep up the good work in reporting both good and bad news.

73 Donald J. Meeker, W4ANP

You've got to know a lot before you know how little you know.

BROWARD Amateur Radio Club, Inc. W4AB meets 2nd Wednesday of month at the Broward County Medical Building, 2200 S. Andrews Ave., Ft. Lauderdale, Fla. at 8 p.m.



# Florida SKIP DIRECTORY

Each month you will find the following listings. Keep it handy. ARRL Officials are listed free. Florida Nets are listed free upon notification from net manager. Clubs listed for \$12.00 per year. (Free to clubs taking box ads elsewhere.) Any individual amateur may be listed for \$5.00 a year. (The ones who really care.) Let's fill up this page!

#### ARRL LISTINGS

Director, S.E. Division CHARLES BOLVIN W4LVV 2210 S.W. 27th Lane Miami, Florida 33133

Vice Director, S.E. Div. A. L. HAMEL, K4SJH 220 N.E. 25th Street Pompano Beach, Fla. 33064

SCM E. Florida JESSE MORRIS, W4MVB P.O. Box 1241 Jacksonville Beach Florida 32051

SCM W. Florida FRANK M. BUTLER, Jr. W4RKH 323 Elliott Rd., S.E. Ft. Walton Beach, Fla. 32548

SEC East Florida ANDY CLARK, W4IYT 41 Lenape Drive Miami Springs, Fla. 33166

SEC West Florida G.D. McKECHNIE, W4IKB 1000 N. 6th Street Chipley, Florida 32428

Asst. SEC East Florida TOM CHISHOLM, W4FP P.O. Box 2273 Lakeland, Florida 33803

#### NET LISTINGS

QFN (all Florida) Daily 2330 & 0300Z 3651 kc. Net Managers W4BVE/ WA40H0

FSBA Sundays 2200Z on 3940 kc.

FSBEN Thursday 0030Z on 3940 kc.

KNIGHTS OF KILOCYCLE, Sundays, 1200Z on 3910 kc.

GATOR NET (GN) Daily 1330 on 3651 kc and 1630 on 7115 kc Net Manager: K4C00

SATN South Atlantic Traffic Net Mon. – Sat. at 0330z on 3945 kc. Net Manager WB4DSP TROPICAL PHONE TRAFFIC 'NET (TPTN)

Daily except Sunday, 2000z on 3945 kc.

Net Manager: W4SMK

FLA. AMATEUR SIDEBAND TRAFFIC NET (FAST) Daily except Sat. 2300Z on 3940 kc. Net Manager: WA4NBT

WEST FLORIDA PHONE NET (WFPN) Daily 2300Z on 3957 kc.

Net Manager: WA4ZGI
INDIVIDUAL LISTINGS

"SLIM" and BERTHA EGGERT WA4AZZ/WA4BMC

1510-17th Avenue-North Lake Worth, Florida 33460 Regards to all our friends.

#### **CLUB LISTING**

DADE RADIO CLUB, INC. (W4NVU) 1st & 3rd Tuesday, Museum of Science 3280 So. Miami Avenue Miami, Florida Mailing address: P.O. Box 73 Biscayne Annex Miami, Florida 33152

NORTH FLORIDA AMATEUR RADIO SOCIETY W4IZ 2nd Thursday, 7:30 P.M. Duval CD Headquarters 107 Market Street Jacksonville, Fla. 32202

ST. PETERSBURG AMATEUR RADIO CLUB, Inc. W4GAC Meetings: 1st Friday FPC Lineman's Assembly Hall, 25th St. & 25th Ave., N. Mailing Address: P.O. Box 4026 For information phone: 544-1856 or 526-6731

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Pres. Shirley Hill, W4WPD
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Tampa, Fla. 33610
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March 1968 FLORIDA SKIP / 13

## TO-5 and Smaller

By Thomas De Bray, K4KRJ

Integrated circuits — microminiaturization — thinfilms—flatbacks — linear circuits — differential amplifiers — monolithic chips — field-effect transistors—epitaxial process—P & N sub-

strates - gold and non-gold doping.

WAIT A MINUTE! WHAT IS ALL THIS TECHNICAL GIBBER-ISH? Sounds like names for electronic diseases, doesn't it? Seriously though, in this column, I will attempt to guide the misguided and inform the uninformed about the "TO-5 and Smaller World." TO-5, of course, is the size of the can or container on which a certain transistor is mounted. What is under the top of the container will be the nucleus of this series. I will talk about some transistor theory, and then for the more advanced experimenter or technician, I will go into such subjects as large and small signal characteristics, logic circuitry, field - effect transistors, digital circuits and more.

Everyday and every hour, right now infact, someone is using or experimenting with microcircuitry. Most of the experimenting is performed in a laboratory, but the microminiature findings of the engineers today will form another world even greater and more astounding than the world of the transistor (one of my old timer friends calls the transistor a three-legged fuse). I will attempt to draw the layman's picture in the ensuing columns about this small globe of electronics. Believe me, if I can understand it, you'll definitely have no problem.

Now, let me introduce myself. Myname is Tom De Bray and my call is K4KRJ. Now that we know one another let's talk elec-

tronics.

WHAT ARE INTEGRATED CIRCUITS? Picture if you will a circuit, let's call it a multipurpose amplifier used in TV sound systems. It is one quarter the size of a pin head. Sounds foolish right off the bat, doesn't it? Well, these circuits are manufactured and used today. The can on which this device fits is .325 inches wide and .750 inches high. It is highly reliable, extremely lightweight and costs very little. It contains 22 resistors, 11 NPN transistors and 3 capacitors. All this packaged under this little roof? Yep! And to identify the components, a good microscope, a steady hand and some knowledge of microcircuitry might be of some help. In this column, I will attempt to help you gain some knowledge of the amazing integrated circuit. I will call them IC's for brevity. IC's, then, are systems comprised of basic electronic circuits and components grown and etched into blocks of semiconductor material.

What the transistor has done to the vacuum tube equipment of years ago, integrated circuits will ultimately do to the pres-



## The Florida Side Banders Association

by Charlie K4SRI

"When you put your hand in a flowing stream, you touch the last that has gone before and the first of what is still to come."

DaVinci's perceptive remark brings forth an important feature of our art - its cumumative nature. We have built on what has gone before, a process that probably sets our means of communication apart from all others. We have profited much from what others have done and are doing, from their failures and from their successes.

Much of the excitement and verve of communications comes from the realization that it is a constantly changing, ever evolving art. There is always something new to learn or a better way of doing the old.

Our organization must be oriented to the future . . . yet based on what we have found to be a successful path out of

experience. Out of our hobby must evolve excellence. Excellence in every day operation, ... beyond that well ...

excellence in achievement, excellence in service.

We must be better in order to justify our very existence. As good; will no longer do. A better rig, a better antenna, more attention to operating practices...to mention a few.

Again thanks to the many old timers in the game from whom one has learned so much ... and to the new comers to whom a diplomatic untruth is a lie . . . and when we became old timers did we report Q5R9 for fear of hurting the other fellows sensitivities when a rotton report would have meant so much more in his endeavors? Too many times as your writer looks back over the years, the report came through Q5R9 and then the inevitable what did you say your call was OM? Oh yes and SSB did not remedy all of the trouble either especially when we forgot that the modulated signal increased power output only within certain very definite limits

ent three-legged fuse of today. Since thousands of IC's are made at one time, they are less costly. A single wafer of semiconductor material contains hundreds of identical circuits and thousands of them are turned out simultaneously.

Let's stop here for this time and, if you will, read the column "The Solid State of the Art" by Earl Spencer, K4FPU. It looks like Earl will present the basic semiconductor theory and what you learn from his articles can be applied to what I will talk about in the months to come.

In the April issue of FLORIDA SKIP, we take a look at the "GROWTH OF THE IC."

(EDITORS NOTE: See Tom's letter to editor on Page 13)

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FOR SALE: One KW linear amp (Heath HA-14) with HP-24 AC and HP-14DC power supplies, \$150.00; Collins 516E DC power supp for KWM-2, 32S-1, or 75S-1, \$75.00. John Schindler, W4R-FA, 14720 Avocado Drive, Homestead, Fla. 33030, Tel. 247-0479.

FOR SALE: Johnson Viking II, clean with manual \$60.00. Johnson 250W Matchbox (less relay) \$38.00. John son KW 520hm low pass filters \$6.00. Johnson VFO Mod. 221 \$15.00. Heath SWR bridge AM-2 \$10.00. Heath Q Multiplier QF-1 \$7.00. Heath Balun coils B-1 \$6.00. Dow-Key Coax switch (110 v.a.c.) with extra DPDT switch \$9.00. Knight R-55A with manual \$27.00. Shure 440SL with push to talk stand \$10.00. Homebrew TR switch with 110 v.a.c. supply \$7.00. Mastercrafter Ham Shack clock with timer \$7.00. All equipment very clean and working. Andy Clark W41YT. 41 Lenape Dr., Miami Springs, Fla. 331-66. Phone 888-3874.

MONITRADIOS MR - 10, 152 - 174mc and Hallicrafter CRX-2, 152-174 mc, crystal controlled, both\$85.00. Turner TV-1 54 to 200 mc signal booster \$20.00. All mint condition. C. Har row WB4HQC, 2081 SE 19th Avenue, Pompano Beach, Fla. 33062. Phone 941-5231

FOR SALE: 2M FM gear. DuMont 6 or 12 V with cables, head, mike, and book \$45.00; Motorola FMTR 5V, new cables and head \$40.00; FMTR 41V-12V, with cables and head, \$45.00; 80-D 6V with cables and head \$50; FMTR 40V-6 meter GM 6V, \$30.00. Geo. McConnell W4LPB, 4302 10th Street, Tampa, Fla. 33603.

FOR SALE: Eico Mutual Conductance Model 666 tube tester \$50.00; Dow Key DK 2-60B for linears in and out, 110-VAC, new \$20.00; Hustler mobile antenna resonators, new: RM-15 \$6.00. RM-20 \$7.00, RM-40, \$8.00; pr 872 As, offer. Saul Cohen K4ACJ, 4524 Michigan Avenue, Miami Beach, Fla. 33140, Tel. 531-9782.

FOR SALE: Excellent DX-100\$65.00, OS-26 scope, needs work, \$20.00, several 813's \$5.00 each. John H. Sohl Jr., W4KQS, 8570 SW 27th Lane, Mi-ami, Florida 33155, Tel. 221-8379.

Praise tends to make good men better and bad men worse.

FOR SALE: Collins 75S3-B revr, 32-S3 mtr, pwr supp and speaker, all like new, list \$1638, 25% off for quick sale. Ernie Hendry, K4CAH, P.O. Box 939, Ft. Myers, Fla., Tel. ED 7-6261 or WE 6-5762.

FOR SALE: 15 meter beam with 50ft. new RG8u, \$16,00. Hammarlund HK-1B Keyer \$30,00 less 22 V. battery. EL-KEY for HK-1B \$12,00. A. Clark W4IYT, 41 Lenage Dr. Miami Springs Fla. 33166. Phone 888-3874.

FOR SALE: Mint condx Drake 2B rcvr, \$165.00. Bob, WA4PWF, 3860 N.W. 179th St., Miami, Fla. 33054, Tel. 621-9497.

FOR SALE: Mosley Tri-Band Model TA-33, Hy-Gain tri-band vertical with roof mount. Old but good, \$20.00 takes all. M.W. Hale K4MWS, Horseshoe Point, Port Salerno, Fla. 33492.

FOR SALE from Estate of K4HNS: Complete Collins rig: 75S-1 rcvr, \$275.00; 32S-1 xmtr and power supp \$395.00; 30L-1 linear \$295.00; complete rig includes mike and connecting cables \$950.00 complete. Also many other pieces of gear, and Hornet 20 meter beam and mast. A. C. Layton, 9150 SW 40th Terrace, Miami Fla. 33165, Tel. 221-8388.

FOR SALE: Spotless HT-32, \$17.5.; Late serial mint KWS-1\$550.00, both \$850.00; TRADE: immaculate Collins 51-S-1 General coverage lists for \$1935.00 for mint only 75S-3B, 30-S-1 and 312-B-4 or what have you. Al Duarte, WA4ZST, 1265 Campo Sano Ave., Coral Gables, Fla. 33146, Tel. 661-0794 (Paid Adv.)

WANTED: VARIAM electronic packages, 4940 to 4970 series. Paul Sibre, Box 737, (520 Monroe #11), Cape Canaveral, Fla. 32920, Tel. 784-2004.

FOR SALE: 75A4, Viking II, other accessories, individually or complete. Jess R. Leach, W4AEP, 1348 Utah Blvd., Orlando, Florida.

WANTED: Motorola FM equipment that can be converted to 2-meters; particularly 30-60 watt base station. Frank Butler, W4RKH, 323 Elliott Rd. Ft. Walton Beach, Fla. 32548. Tele-904-244-5425.

A man who is contented with what he has done will never become famous.

FOR SALE: Heath SB-101, HP-23 pwr supp, SB-600 spkr console, \$400.; Heath HA-10 Warrior linear, \$170,00; Hickok OS-8/U scope (unitized) \$45. Will sell SB101 separately. Kris Krysiak, W4FCP, P.O. Box 465, Sebring, Fla. 33870, Tel. EV 5-7353.

FOR SALE: Heath SB-400, \$250.00; Knight grid dipper, \$10.00. Will demonstrate on the air by sked. W.H. Combs W4KEB, Star Route, Jensen Beach, Fla., Tel. 287-6617.

FOR SALE: 40 meter Mosley TA-40-KR conversion kit for TA-33, TA-32, or TA-36 beam, new condition, \$25.00. G. F. Shepherd, W4IEV, 7531 SW 63 Ct., Miami, Fla. 33143, Tel. 667-4041.

FOR SALE: SB-100 and HP-23 power supp, \$275.00. HW-12 and HP-23 power supply and mike, \$100.00, all in excellent condition. R. Buehn, W4Z-RG, 14 Glenmore Circle, Melbourne, Fla. 32901.

FOR SALE: Viking Valiant xmtr in good condx \$120.00; Mosley CM-1 dual conversion rcvr with matching spkr in excellent condx, \$90.00. Will throw in turner mike, vibroplex, AM-ECO preamp and CDR a antenna rotor if bought together. Steve Urueta, WA-4YUM, 6531 SW 19 St., Miami, Fla., Tel. 665-4609.

FOR SALE: Hallicrafters SR - 160 transceiver with AC supply PS-150-120 in mint condx, \$175.; R. W. Freitag W4FH, P.O. Box 762, Delray Bch. Fla. 33444, Tel. 276-6571.

FOR SALE: Hallicrafters SR-150, a.c. power supply, d.c. supply, mike, rack D-104 mike. Heath SWR meter, 44 ft self supporting Vestotower, Mosley 3 bander beam, \$500.00 or trade for comparable professional tape stereo tape recorder. J. J. Gaskins, 8000 Seminole Blvd., St. Petersburg, Fla. 33540 Phone 391-6202.

FOR SALE: Drake TR-4 with AC supply, speaker, combo. Perfect, like new \$500.00. C. S. Beck W4ZO, Box Orange Springs, Florida. 305-GA3-2300 Orlando.

BACK ISSUES OF FLORIDA SKIP. First come, first serv. Full 12 issues \$3.00. Individual copies 20¢ post paid. Write Florida Skip, Box 501, Miami Springs, Fla. 33166. Specify year and/ or months needed.

WANTED: Tape recorder. Have Polaroid 150, blinker, light meter and filter to swap. Grover Onewuch, W5DFZ, Box 127, Vero Beach, Fla. 32960 Phone 567-2524.

NEED BADLY: BC-458 for Central Electronics 20-A. VFO should be operative on 40 meters. Andy John, WB4DLT, 516 - 5th Street, SE, Winter Haven Fla. 33880.

FOR SALE: Loudenboomer Mark 2 with matching power supply \$225.00 HQ-110 with HC-10 \$175.00. Eldico 144 watt PRP SSB transmitter with extra crystals \$100.00. Heath Tower and Big Wheel antenna \$50.00. Smith H. Sutley W4POD, 840 Fifth St., Port Orange, Fla. 32019. Phone 767-4264.

FOR SALE: Heath kit Warrior, new finals, 3B28's, 4 spares, dow-key relay FB condition \$150.00 E. C. Edwards WA4SGF, 5052 Lexington Ave., Jacksonville, Fla. 32210. Phone -389-6197.

WILL SWAP: New Lafayette HA-1200, 2 meter transciever 117 a.c. and 12 v.d.c., VFO, mike, power input 25 watts tuning range 144-148 mc. All in one nice little unit \$140.00. Will trade need following. 152-174 mc reciever, General coverage receiver, tape recorder, 4 track, what have you? Bob McClaran W4ZPP, Box 2513, Vero Beach, Fla. 32960 Phone - 567-4974 after 5 p.m.

AMATEUR - WHOLESALE ELECT-RONICS, (Div. of International Electronic Systems, Inc.), 280 Aragon Avenue, Coral Gables, Florida 33134. Franchised distributor for Collins, Galaxy, Swan, BTI, Hy-Gain, Ameco, EZ-Way, etc. Write for current used equipment list. No one anywhere will beat our price. Have a better offer? We will top it!! We trade and we service what we sell. Come in and see us. Phone 305-444-6206. See our ad every Sunday in the Miami Herald, Column II-08. (Paid adv.)



AD4TZI

Lou Begenroth, A4VPQ, Area Co-Ordinator for the Florida District Two Juliett two-meter net, comments that perhaps the reason some operators are unable to hold open the squelch and make contact through the Fort Pierce Repeater is that their antennas are not out to the exact length to transmit on 148.01 mHz. The Repeater receives on a very narrow band. Thus it seems apparent that at the Repeater receiving frequency, antenna dimensions can be quite critical. It is his observation that most ready-made two meter antennas are cut to the middle or low end of the twometer band. Therefore he suggests that, if difficulty is being experienced, you check up on your antenna to make certain that it is cut as close as possible for transmitting on 148.01 mHz. When cut to this dimension reception at your station should present no difficulty as your receiver probably receives over a much broader range than does the receiver at the Repeater.

Seems like certain Army MARS members (those who still have to pay income taxes) are going to get a small 'break' on the taxes they have to pay. A current report has it that a new directive has come down from on high to allow MARS members to take certain deductions for their out-of-pocket expenses in connection with their MARS activities. Since the details appear to involve some complications it is recommended that MARS members contact their local Internal Revenue Service offices with reference to IRS Bulletin 1967-43 of October, 1967. The subject of these allowable deductions is covered on Page 12 of that bulletin by Revised rule No. 67-364. Here's wishing you luck!

Gene Farthing, AA4KHT, District Director, reminds all Florida Two Third Army MARS members that when Sig. 81 cards are prepared at the end

(Continued on Page 16)

March 1968 FLORIDA SKIP / 15

#### A HOWARD QUAD ANTENNA

THE HOWARD QUAD IS NOT NEW IN DESIGN BY A LONG-SHOT. IT HAS BEEN PUBLISHED MANY TIMES BUT WHAT WE HAVE DONE IS IMPROVE THE WEIGHT BY USING ALUMINUM FOR THE SPIDER. WE ALSO SUPPORT THE ANTENNA WIRES AT THE SPREADERS BY PVC RINGS, ALLOWING FREEDOM OF THE WIRE.

This eliminates breaking because the normal swaying in the breeze flexes the wire and eliminates breaking. The antenna wires slip thru the rings if you want to adjust the insulators to the center.

Quads are built to a full wave, resulting in low Q and high signal to noise ratio. This hypotenuse of an angle design uses NO BOOM, therefore, the element spacing for all bands is .15 of a wave spacing for optimum operation (1:1.2 SWR rating). This balance allows feeding all three bands by one feedline, RG 8-U.

THE ALUMINUM FOR REDUCTION OF WEIGHT AND RIBBING WITH FLANGES FOR STRENGTH, RE-SULTS IN A BALANCED CONSTRUCTION.

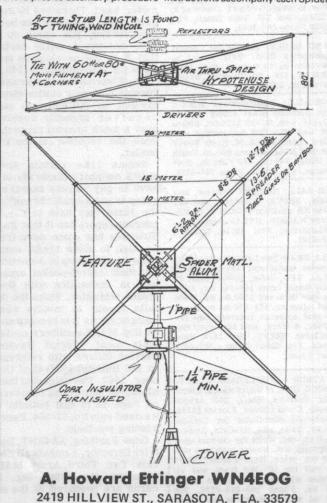
Regular TV rotators are used. The use of bamboo or fiber glass spreaders is optional. Good bamboo, covered, will last about 5 years.

The Spider assembled with U-bolts padded, clamps, and one coax insulator, boxed F.O.B. Sarasota.

No. 6

To simplify the shipping we do not include the 8-13 ft. spreaders, 1" pipe, 335-ft. No. 9 antenna wire, or 3 insulators.

More precise assembly procedure instructions accompany each Spider.





Jim Wilson NØWCK-W4GDK

Continued growth of the mem-Areas is very gratifying. Par-

port, Miss. as an overseas com- radio. munication unit for the Seebee base in that city.

Gulfport is the "Homeport" for the Mobile ConstructionBattalion. They have two other bases elsewhere.

NØJUX is already checking into our regular Navmars nets anticipated that they will assign

tinations in the eastern part of the country. They have Collins equipment and a large beam. Being right on the edge of the Gulf their communication to RVN should be excellent. We wish them well and assure them of the cooperation of the entire Navmars organization.

Georgia Denman NØGAJ, Coordinator for N.E. Florida urges that all informals be put into formal message form to give newcomers practice in message handling.

Recently Navmars participated in an activity related to the Boy Scouts Communication Month. Our director in Charleston, S.C. mentioned that a Den bership in all three Florida of Cub Scouts were coming over to see how the director's station ticipation in our traffic nets is worked. He asked if others an inspiration to the other seven could do the same. NØEQW areas in the 6th Naval District. of Orlando, NØJJB, Pensacola One valuable addition has and NØWCK, Ft. Lauderdale come to the Southern part of had visits from similar groups the 6ht District. A new station who got a big thrill from being NØJUX has just opened in Gulf- able to talk to other scouts by

> NØJJB is doing a fine job ckecking in to take N.W. Florida traffic.

#### **ARMY MARS**

(Continued from Page 15)

for traffic handling. Also, it is of each month, each card must show under the "Comments" a frequency close to the 15 heading, total messages sent meter band to start handling and total received that month. phone patches from military This will enable headquarters personnel in Viet Nam to des- to record total traffic handled.

#### FLORIDA SKIP HOSTS

(Continued from Page 1)

Florida county. Trophies will be awarded to the highest scoring station in the following categories: Out-of-state. Florida single operator, and Florida multi-operator.

LOGS: All logs must be postmarked no later than April 30. 1968 and mailed to: FLORIDA SKIP, Contest Chairman, P. O. Box 501, Miami Springs, Florida 33166. Please include your name, call, and address in block letters on your logs. Your logs should indicate your scoring category and be signed by each operator.

PUBLISHED SCORES: All contest scores will be published in the June or July issue of FLORIDA SKIP. If you would like a copy, please let us know and send along a 4 cent stamp.

> GOOD LUCK ES 73 Rex Trobridge, W4BYB Contest Chairman FLORIDA QSO PARTY



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